

U. S. GEOLOGICAL SURVEY
 ANNUAL PEAK FLOW FREQUENCY ANALYSIS
 Following Bulletin 17-B Guidelines
 Program peakfq
 (Version 4.0, December, 2000)

Station - 04085200 KEWAUNEE RIVER NEAR KEWAUNEE, WI
 2002 MAR 13 09:02:38

I N P U T D A T A S U M M A R Y

Number of peaks in record	=	42
Peaks not used in analysis	=	0
Systematic peaks in analysis	=	42
Historic peaks in analysis	=	0
Years of historic record	=	0
Generalized skew	=	-0.300
Standard error of generalized skew	=	0.550
Skew option	=	WEIGHTED
Gage base discharge	=	0.0
User supplied high outlier threshold	=	--
User supplied low outlier criterion	=	--
Plotting position parameter	=	0.00

***** NOTICE -- Preliminary machine computations. *****
 ***** User responsible for assessment and interpretation. *****

WCF134I-NO SYSTEMATIC PEAKS WERE BELOW GAGE BASE.	0.0
WCF195I-NO LOW OUTLIERS WERE DETECTED BELOW CRITERION.	465.5
WCF163I-NO HIGH OUTLIERS OR HISTORIC PEAKS EXCEEDED HHBASE.	14427.5

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ANNUAL FREQUENCY CURVE PARAMETERS -- LOG-PEARSON TYPE III

	FLOOD BASE		LOGARITHMIC		
	DISCHARGE	EXCEEDANCE PROBABILITY	MEAN	STANDARD DEVIATION	SKEW
SYSTEMATIC RECORD	0.0	1.0000	3.4136	0.2762	-0.186
BULL.17B ESTIMATE	0.0	1.0000	3.4136	0.2762	-0.221

ANNUAL FREQUENCY CURVE -- DISCHARGES AT SELECTED EXCEEDANCE PROBABILITIES

ANNUAL EXCEEDANCE PROBABILITY	BULL.17B ESTIMATE	SYSTEMATIC RECORD	'EXPECTED PROBABILITY' ESTIMATE	95-PCT CONFIDENCE LIMITS FOR BULL. 17B ESTIMATES	
				LOWER	UPPER
0.9950	441.7	451.0	391.3	287.0	602.5
0.9900	533.0	541.6	485.5	359.6	709.1
0.9500	876.3	881.5	840.3	650.1	1097.0
0.9000	1132.0	1134.0	1103.0	877.5	1380.0
0.8000	1530.0	1528.0	1510.0	1240.0	1820.0
0.5000	2653.0	2643.0	2653.0	2253.0	3129.0
0.2000	4451.0	4448.0	4500.0	3738.0	5499.0
0.1000	5759.0	5775.0	5880.0	4738.0	7391.0
0.0400	7506.0	7568.0	7786.0	6010.0	10080.0
0.0200	8862.0	8972.0	9317.0	6961.0	12270.0
0.0100	10250.0	10430.0	10940.0	7913.0	14600.0
0.0050	11690.0	11930.0	12670.0	8870.0	17060.0
0.0020	13640.0	14010.0	15150.0	10150.0	20540.0
0.6667	2009.6	(1.50-year flood)			
0.4292	2972.1	(2.33-year flood)			

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I N P U T D A T A L I S T I N G

WATER YEAR	DISCHARGE	CODES	WATER YEAR	DISCHARGE	CODES
1958	1310.0		1979	4070.0	
1959	3220.0		1980	2440.0	
1960	6500.0		1981	2760.0	
1961	1100.0		1982	2350.0	
1962	3400.0		1983	1190.0	
1963	4700.0		1984	1600.0	
1964	1640.0		1985	3470.0	
1965	4920.0		1986	5550.0	
1966	4000.0		1987	780.0	
1967	3200.0		1988	3600.0	
1968	1850.0		1989	4680.0	
1969	1990.0		1990	8570.0	
1970	673.0		1991	1770.0	
1971	1900.0		1992	1670.0	
1972	2500.0		1993	6010.0	
1973	5700.0		1994	2730.0	
1974	5800.0		1995	1180.0	
1975	3860.0		1996	5700.0	
1976	4680.0		1998	1790.0	
1977	1160.0		1999	1510.0	
1978	2460.0		2000	1000.0	

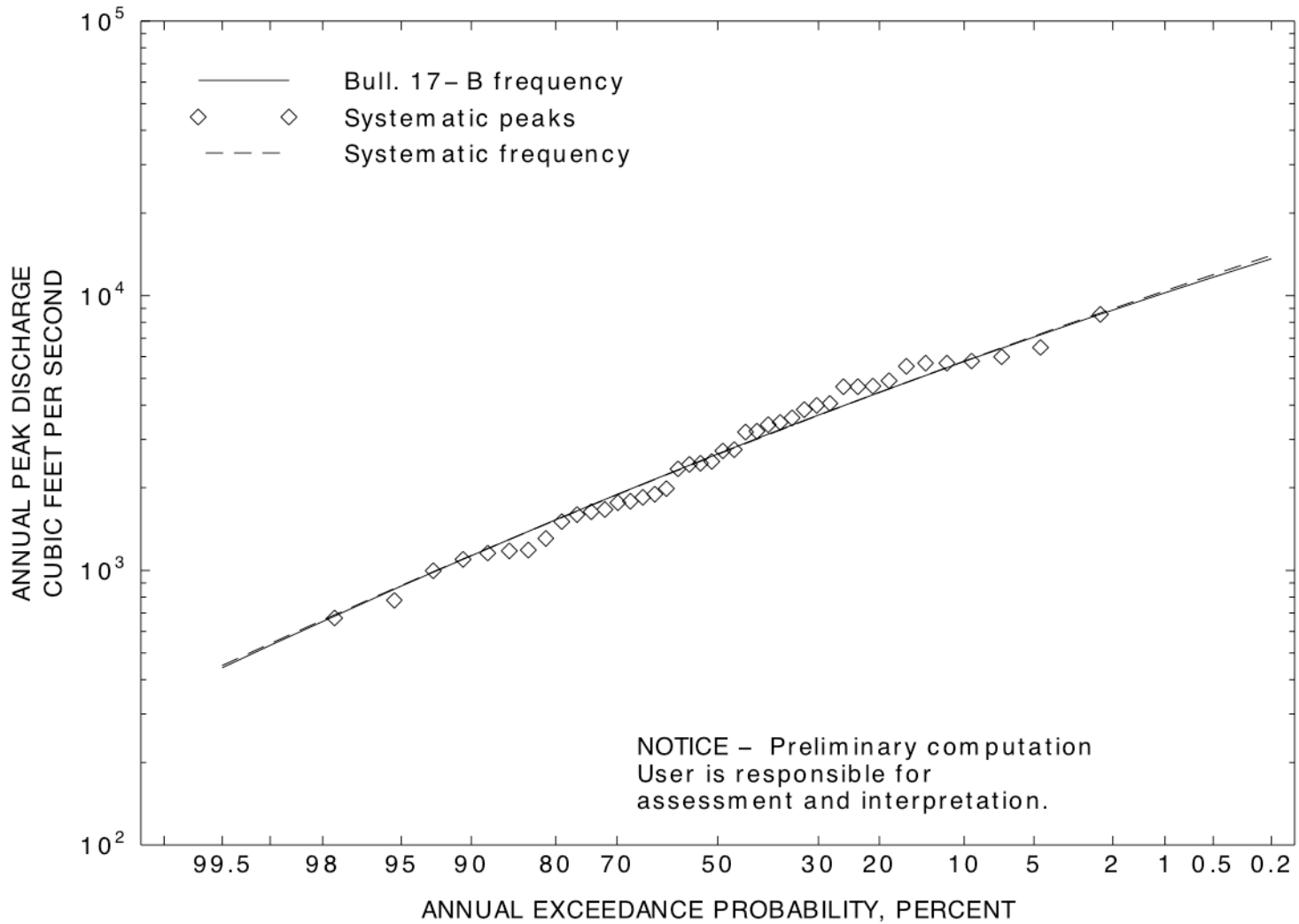
Explanation of peak discharge qualification codes

PEAKFQ	WATSTORE	
CODE	CODE	DEFINITION
D	3	Dam failure, non-recurrent flow anomaly
G	8	Discharge greater than stated value
X	3+8	Both of the above
L	4	Discharge less than stated value
K	6 OR C	Known effect of regulation or urbanization
H	7	Historic peak

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EMPIRICAL FREQUENCY CURVES -- WEIBULL PLOTTING POSITIONS

WATER YEAR	RANKED DISCHARGE	SYSTEMATIC RECORD	BULL.17B ESTIMATE
1990	8570.0	0.0233	0.0233
1960	6500.0	0.0465	0.0465
1993	6010.0	0.0698	0.0698
1974	5800.0	0.0930	0.0930
1973	5700.0	0.1163	0.1163
1996	5700.0	0.1395	0.1395
1986	5550.0	0.1628	0.1628
1965	4920.0	0.1860	0.1860
1963	4700.0	0.2093	0.2093
1976	4680.0	0.2326	0.2326
1989	4680.0	0.2558	0.2558
1979	4070.0	0.2791	0.2791
1966	4000.0	0.3023	0.3023
1975	3860.0	0.3256	0.3256
1988	3600.0	0.3488	0.3488
1985	3470.0	0.3721	0.3721
1962	3400.0	0.3953	0.3953
1959	3220.0	0.4186	0.4186
1967	3200.0	0.4419	0.4419
1981	2760.0	0.4651	0.4651
1994	2730.0	0.4884	0.4884
1972	2500.0	0.5116	0.5116
1978	2460.0	0.5349	0.5349
1980	2440.0	0.5581	0.5581
1982	2350.0	0.5814	0.5814
1969	1990.0	0.6047	0.6047
1971	1900.0	0.6279	0.6279
1968	1850.0	0.6512	0.6512
1998	1790.0	0.6744	0.6744
1991	1770.0	0.6977	0.6977
1992	1670.0	0.7209	0.7209
1964	1640.0	0.7442	0.7442
1984	1600.0	0.7674	0.7674
1999	1510.0	0.7907	0.7907
1958	1310.0	0.8140	0.8140
1983	1190.0	0.8372	0.8372
1995	1180.0	0.8605	0.8605
1977	1160.0	0.8837	0.8837
1961	1100.0	0.9070	0.9070
2000	1000.0	0.9302	0.9302
1987	780.0	0.9535	0.9535
1970	673.0	0.9767	0.9767



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